

# "Plastics shape the future"

Programme of the special show at K 2019 Hall 6, booth 6/C 40

Programme 27/9/2019







The special show "Plastics Shape the Future" is a platform for solution approaches and answers to current social trends and discussions. Crucial topics will be discussed in detail, including circular economy, marine litter, and conservation of resources, but also materials innovation and digitalisation. "Plastics Shape the Future" not only will offer an international information and networking platform, but also provide for greater involvement of policymakers and socially relevant groups in the form of keynote speeches and panel discussions.

The special show is a project of the German plastics industry and organised by PlasticsEurope Deutschland e. V. and Messe Düsseldorf. From October 16 to 23 at K 2019 in Düsseldorf, the special show will highlight what developments are already taking shape today and what visions can become the reality of tomorrow.

#### Information for participants and visitor:

During the event, the organisers will take photos and videos of guests and participants for public relations purposes. These records may be published on the organisers' websites, in social networks, or print publications for the aforementioned purpose.



### **Overview**

#### Theme Days

Wednesday, 16.10. Plastics Shape the Future

**Thursday, 17.10**. Plastics for sustainable development **Friday, 18.10**. Digitalisation / Plastics Industry 4.0

Saturday, 19.10. Plastics between circular economy and marine litter

Sunday, 20.10. Youth & Education / "Golden Sunday"

**Monday, 21.10.** Functionality I (materials, processes, design): additive manufacture, lightweight

construction, mobility

**Tuesday, 22.10**. Functionality II (materials, processes, design): new materials, additives, bioplastics

#### and daily

#### Robotics FabLab in Action

Young tinkerers and inventors from Lübeck use plastics and 3D printing to build and programme a humanoid robot.

- Chemist Dr. Gerhard Heywang will perform his exciting scientific experiments.
- Video "Plastics shape the future".

Find the latest programme version on www.plasticsshapethefuture.com



# Wednesday, 16.10.2019 Theme day "Plastics Shape the Future"

10:30 – 11:00 **Stand opening** 

- Werner Matthias Dornscheidt, President & Chief Executive Officer of Messe Düsseldorf
- Ulrich Reifenhäuser, President of K fair
- Dr. Michael Zobel, President of PlasticsEurope Deutschland e. V.

#### 11:00 **Keynote**

Dr. Markus Steilemann

Alliance To End Plastic Waste; Chief Executive Officer, Covestro AG

#### 13:00 – 14:00 Robotics FabLab in Action

**14:00 − 15:00 Speeches / presentations** 

- Prof. Dr.-Ing. Dieter Stapf, Head of Institute, Karlsruhe Institute of Technology (KIT), Institute for Technical Chemistry: Chemical Recycling of Plastic Waste
- **Friedrich Barth**, Managing Director, ISC3 International Sustainable Chemistry Collaborative Centre
- **Dipl.-Ing. Volker Korten**, Director Environmental protection, Resources, Occupational safety, BSH Hausgeräte GmbH: Plastics shape Circular Economy

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Facilitator: Dr. Melinda Crane

#### Participants:

- Friedrich Barth, Managing Director, ISC3 International Sustainable Chemistry Collaborative Centre
- Ministerialrat Dr. Dietmar Kopp, Head of Division "Chemical and Pharmaceutical Industry", Federal Ministry for Economic Affairs and Energy (BMWi) and Commissioner for Nanotechnology
- Alliance To End Plastic Waste

#### 17:00 – 18:00 Robotics FabLab in Action



## Thursday, 17.10.2019 Theme day "Plastics for Sustainable Development"

10:15 – 10:30	Robotics FabLab in Action
10:30 – 11:30	<ul> <li>Stakeholder talk         Plastics Value Chain Germany         <u>Facilitator</u>: Michael Reubold, Publishing Manager &amp; Editor-in-Chief, CHEManager         <u>Participants</u>:         <ul> <li>Peter Kurth, Managing President, BDE (Federal Association of the German Waste management, Water and Raw Materials Industry)</li> </ul> </li> <li>Ulrich Reifenhäuser, Chairman, VDMA Plastics and Rubber Machinery Association</li> <li>Roland Straßburger, President, IK Industrievereinigung Kunststoffverpackungen e.V. (German Association for Plastics Packaging and Films)</li> <li>Dr. Michael Zobel, President, PlasticsEurope Deutschland e. V.</li> </ul>
12:00 – 13:00	<ul> <li>Press Conference PlasticsEurope</li> <li>Javier Constante, President, PlasticsEurope</li> <li>Dr. Rüdiger Baunemann, Regional Director, PlasticsEurope</li> </ul>
13:30 – 14:00	Robotics FabLab in Action
14:30 – 15:00	Experiments with plastics
15:00 – 16:00	<ul> <li>Speeches / presentations</li> <li>Mapi Diego Bielsa, Polymer Researcher and R&amp;D project leader, AIMPLAS: BIOVEGE Project: Sustainable Developments For Food Packaging</li> <li>Marco Jansen, Business Director Circular Economy in Europe, Braskem</li> <li>Almut Reichel, Sustainable Resource Use and Waste Expert, European Environment Agency</li> </ul>
16:00 – 17:00	<ul> <li>Panel Discussion "Plastics for Sustainable Development"         <u>Facilitator:</u> Prof. DI Drmont. Reinhold W. Lang, Head of Institute, Johannes Kepler University Linz / Institute of Polymeric Materials and Testing; Member of the Scientific Council der K 2019     </li> <li><u>Participants:</u> <ul> <li>Dr. Bettina Liebmann, Umweltbundesamt GmbH</li> <li>Almut Reichel, Sustainable Resource Use and Waste Expert, European Environment Agency</li> <li>Further participants requested.</li> </ul> </li> </ul>
17:00 – 17:30	Robotics FabLab in Action



# Friday, 18.10.2019 Theme day "Digitisation / Plastics industry 4.0"

17:00 - 17:30

10:15 – 10:30	Robotics FabLab in Action
10:30 – 12:00	Speeches / presentations Implementation of the Voluntary Commitment of PlasticsEurope: Sustainability initiatives of the plastics manufacturing industry Facilitator: Dr. Rüdiger Baunemann, Director General PlasticsEurope Deutschland e. V. Polyolefin Circular Economy Platform (PCEP) / Styrenics Circular Solutions (SCS) / VinylPlus / Ceflex / PlastiCircle / Petcore Europe
12:00 – 12:30	Experiments with plastics
13:30 – 14:00	Robotics FabLab in Action
14:30 – 15:00	Experiments with plastics
15:00 – 16:00	<ul> <li>Speeches / presentations</li> <li>Shilpa Khare, Fraunhofer Institute for Structural Durability and System Reliability LBF: "Smart networking: intelligent sensors monitor and optimise industrial processes 4.0"</li> <li>Andre Schult, Fraunhofer Institute for Process Engineering and Packaging: Combination of human experience and machine learning in production with selflearning assistance systems</li> <li>Christian Schiller, Managing Director of cirplus GmbH: Digital revolution or Hype? Digitization as crucial catalyst for the circular economy of plastics</li> <li>Prof. Dr. Bastian Rapp, Freiburger 3D-Druck-Allianz: Glassomer - The Revolution in Glass Processing</li> </ul>
16:00 – 17:00	<ul> <li>Panel Discussion "Digitisation / Plastics industry 4.0"         <u>Facilitator</u>: UnivProf. DrIng.Christian Hopmann, Director of the Institute of Plastics Processing (IKV) at RWTH Aachen University; Member of the Scientific Council der K 2019     </li> <li><u>Participants:</u> <ul> <li>Christian Schiller, Managing Director of cirplus GmbH</li> <li>Michael Wittmann, Wittmann Kunststoffgeräte GmbH</li> <li>Representative plastics manufacturers</li> <li>Representative plastics converters</li> </ul> </li> </ul>

**Robotics FabLab in Action** 



10:30 - 11:00

# Saturday, 19.10.2019 Theme day "Plastics between circular economy and marine litter"

**Robotics FabLab in Action** 

11:00 – 12:30	<ul> <li>Speeches / presentations</li> <li>DrIng. Saskia Ziemann, Projektträger Karlsruhe (PTKA): The BMBF research focus "Plastics in the environment – Sources, Sinks, Solutions"</li> <li>Susanne Dorasil, Head of Unit, Federal Ministry for Economic Cooperation and Development: Presentation Prevent Waste Alliance</li> <li>Dorothea Wiplinger, Sustainability Manager Borealis AG: STOP Initiative</li> <li>Ulrich Clausing, German Canoe Association (Deutsche Kanu-Verband e.V.) Waste collection bag (MUSS – Müll- und Unratsammelsack)</li> <li>Michael Schmidt, Ozeankind e. V.: Taka Taka on Zanzibar - the plastic bottle project</li> <li>Stephan Horch, CEO Clean River Project e.V.: Clean River Project - Paddling and photo art for clean rivers and oceans!</li> <li>Prof. Dr. Ulrich Giese, Managing Director Deutsches Institut für Kautschuktechnologie e.V. (German Institute for Rubber Technology), Member of the Scientific Council K 2019: "Tire wear particles and rubber ingredients in the environment - Appearance and fate"</li> <li>Branko Šmon, "Earth Plastic View – the Matterhorn project"</li> </ul>
13:30 – 14:00	Robotics FabLab in Action
14:30 – 15:00	Experiments with plastics
15:30 - 16:00 • 16:00 - 17:00 17:00 - 17:30	<ul> <li>Keynote</li> <li>Mark Nikolich, World Plastics Council, CEO Braskem America Commitment of the global plastics manufacturers against marine litter</li> <li>Panel Discussion "Plastics between circular economy and marine litter"         Facilitator: Prof. DrIng. Christian Bonten, Institute management University of Stuttgart / Institute for Plastics Technology; Member of the Scientific Council K 2019 Participants:     </li> <li>Maria Ciliberti, Vice President (VP) Marketing and New Business Development for Polyolefins, Borealis</li> <li>DrIng. Christoph Epping, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety</li> <li>Sarah Marshall, Alliance to End Plastic Waste; Director of Sustainability, NOVA Chemicals</li> <li>Willemijn Peeters, CEO Searious Business</li> </ul>
17:00 – 17:30	Robotics FabLab in Action



## Sunday, 20.10.2019 Theme day "Youth and Education"/ "Golden Sunday"

10:30 – 11:00	Robotics FabLab in Action
11:00 – 12:30	"Youth meets CEOs"  Participants:  Javier Constante, Commercial Vice President, Packaging & Specialty Plastics EMEA, DOW / President of PlasticsEurope  Stefan Sommer, Vice Chairman PlasticsEurope Deutschland e. V., President of Vynova Group
12:30 – 13:00	Experiments with plastics
13:00 – 13:30	<ul> <li>Kuno, Olly, Plastek &amp; Plasty at K 2019</li> <li>Introduction on PlasticsEurope's primary school education kit         Participants:         <ul> <li>Dr. Rüdiger Baunemann, Director General PlasticsEurope Deutschland e. V.</li> <li>Philip Law, Director General, British Plastics Federation</li> </ul> </li> <li>Prof. Gisela Lück, University of Bielefeld, Faculty of Chemistry/Chemistry and Didactics of Chemistry I</li> <li>Dr. Anna Szalkowska, Communications Manager Foundation PlasticsEurope Polska</li> </ul>
14:00 – 15:00	<ul> <li>Panel Discussion "Youth and Education"         <u>Facilitator:</u> Prof. Hans-Werner Schmidt, University of Bayreuth, Chair in Macromolecular Chemistry I, Member of the Scientific Council K 2019 Participants:         <ul> <li>Prof. DrIng. Martin Bastian, SKZ – Das Kunststoff-Zentrum</li> <li>Prof. Gisela Lück, University of Bielefeld, Chemistry and Didactics of Chemistry</li> <li>Ralf Olsen, Director General pro-K Industrieverband Halbzeuge und Konsumprodukte aus Kunststoff e. V., KAI-Ausbildungsinitiative</li> <li>Jürgen Pischke, Manager Human Resources, Germany, LyondellBasell</li> <li>Prof. DrIng. Alois K. Schlarb, Head of the Department of Composite Engineering (CCe) at the Technische Universität Kaiserslautern; Member of the Scientific Council K 2019</li> </ul> </li> </ul>
15:00 – 16:00	"Golden Sunday" Olympic athletes and professional sportsmen and women of Team Kunststoff
16:00 – 16:30	Experiments with plastics
17:00 - 17:30	Robotics FabLab in Action



# Monday, 21.10.2019 Theme day ""Functionality I (materials, processes, design): additive manufacture, lightweight construction, mobility"

10:30 – 11:00	Robotics FabLab in Action
11:00 – 11:30	Experiments with plastics
11:30 – 12:30	Ceremony of the prizes awarded by the "Wissenschaftlicher Arbeitskreis Kunststofftechnik" / Scientific Alliance of Plastics Technology (WAK)  Host: Prof. Christian Bonten, University of Stuttgart Prof. DrIng. Dietmar Drummer, Friedrich-Alexander-University Erlangen-Nuremberg Prof. DrIng. Michael Gehde, Technical University Chemnitz
13:30 – 14:00	Robotics FabLab in Action
14:30 – 15:00	Experiments with plastics
15:00 — 16:00	<ul> <li>Speeches / presentations</li> <li>Dr. Jörg Gerken, rpm - rapid product manufacturing GmbH         Ppotentials on the tool-free serial production with plastics in the E automotive         engineering by using DLS<sup>TM</sup></li> <li>Prof. DrIng. habil. Maik Gude, Chair of Lightweight Design and Structural         Assessment, Dr. Michael Stegelmann, Technical University Dresden, Institute of         Lightweight Engineering and Polymer Technology: Multimaterial lightweight         construction in the mobility of the future</li> <li>Dr. Christian Müller, Global Technical Market Manager, Green Polymer Additives,         Emery Oleochemicals GmbH: Plastic Shape The Future - How polymer plus         additives enable an alternative 3D printing method for metals &amp; ceramics</li> </ul>
16:00 – 17:00	<ul> <li>Panel Discussion "Functionality I (materials, processes, design): additive manufacture, lightweight construction, mobility"         Facilitator: Prof. DrIng. Alois K. Schlarb, Head of the Department of Composite Engineering (CCe) at the Technische Universität Kaiserslautern; Member of the Scientific Council K 2019         Participants:         <ul> <li>Dr. Christina Hack, Leiterin Vorentwicklung, Brose Gruppe</li> <li>Werner Loscheider, Head of Division IVB4 Construction, Light-Weighting/New Materials, Protection of Natural Resources, Federal Ministry of Economic Affairs and Energy</li> <li>Andreas Stoeckle, Vice President, Head of Industrial Site Donauwörth, Airbus Helicopters</li> <li>Dr. Axel Tuchlenski, Head of Global Product &amp; Application Development, LANXESS Deutschland GmbH</li> </ul> </li> </ul>
17:00 – 17:30	Robotics FabLab in Action



Tuesday, 22.10.2019
Theme day "Functionality II (materials, processes, design): new materials, additives, bioplastics "

10:30 – 11:00	Robotics FabLab in Action
11:00 – 12:00	<ul> <li>Speeches / presentations</li> <li>Prof. DrIng. Hans-Josef Endres, Institutsleiter, Institut für Kunststoff- und Kreislauftechnik Leibniz Universität Hannover (LUH): Bioplastics - viewed from different perspectives</li> <li>Dr. Harald Käb, NAROCON Innovations Consulting: Biobased Plastics - A Great Contribution to the Future of Plastics</li> <li>Jochen Moesslein, Managing Director Polysecure GmbH: New Marker Technologies for Product Tracking and Material Sorting (Tracer-Based-Sorting)</li> <li>Dr. Bärbel Schambach, Managing Director FNK, German Institute for Standardization: Shaping the future together - with standards and DIN</li> </ul>
12:00 – 12:30	Experiments with plastics
13:00 – 14:00	Press Conference Alliance to End Plastic Waste
15:00 – 15:30	Experiments with plastics
15:30 – 16:00	Keynote Dr. Jörg Rothermel, Verband der chemischen Industrie e. V.: Carbon cycles in chemistry
16:00 – 17:00	<ul> <li>Panel Discussion "Functionality II (materials, processes, design): new materials, additives, bioplastics "         Facilitator: Prof. Dr. Rudolf Pfaendner, Division Director Plastics, Fraunhofer Institute for Structural Durability and System Reliability LBF         </li> <li>Participants:         <ul> <li>Michael Carus, nova-Institut GmbH</li> <li>DI Dr. Helmut Frischenschlager, Umweltbundesamt GmbH</li> <li>Dr. Christoph Gürtler, Head of Catalysis Research, Covestro Deutschland AG</li> <li>Dr. Jörg Rothermel, Verband der chemischen Industrie e. V.</li> </ul> </li> </ul>
17:00 – 17:30	Robotics FabLab in Action



# Wednesday, 23.10.2019

10:30 – 11:00	Robotics FabLab in Action
12:00 – 12:30	Experiments with plastics
13:30 – 14:00	Robotics FabLab in Action
16:00 – 16:30	Experiments with plastics



The special show at K 2019 is a project of the German plastics industry under the leadership of PlasticsEurope Deutschland e. V. and Messe Düsseldorf.



